



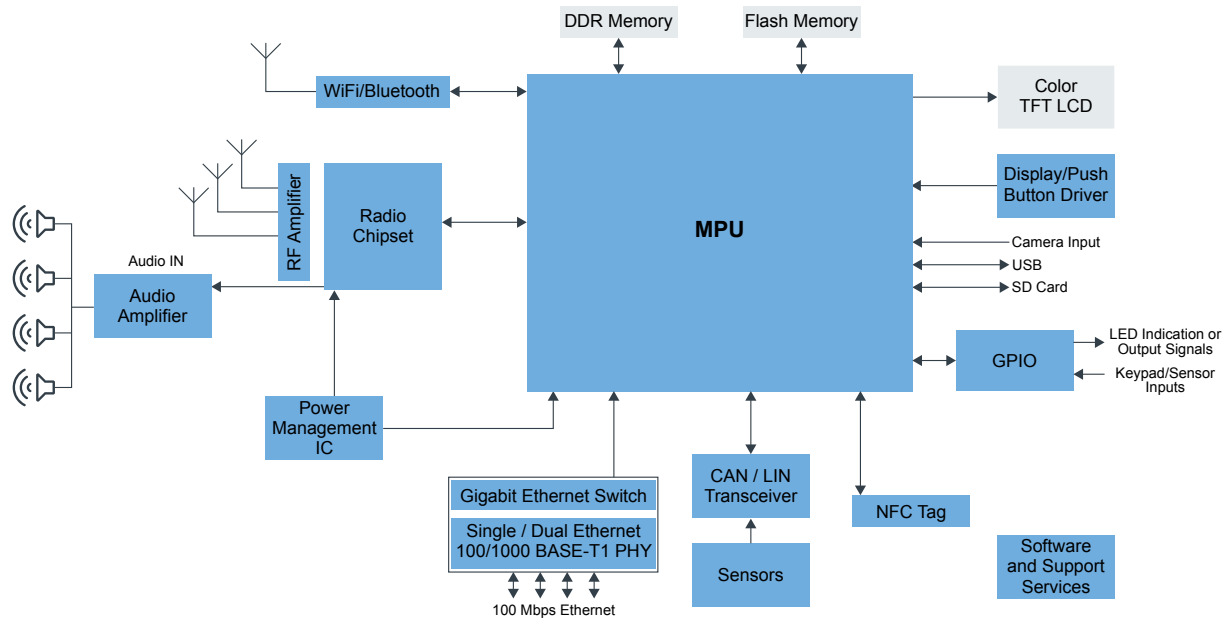
# Connected Radio

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In-car audio systems today have changed from basic radio and CD systems to connected systems that can access content from various sources. Customers are expecting to plug in USB drives, insert SD cards or to connect their Bluetooth® hands-free devices even in the low-end segment.

NXP's comprehensive portfolio of AM/FM tuner and amplifier solutions and Arm®-based microprocessors offer a scalable set of product families that helps you design entry level connected radio and infotainment systems with USB, AM/FM and Bluetooth connectivity with enhanced audio and user interface capabilities.

## Connected Radio Block Diagram



■ NXP Technology   
 ■ Non NXP Technology   
  Optional Technology

**Recommended Products for Connected Radio**

MPU	<ul style="list-style-type: none"> <li>• <a href="#">i.MX6UL</a>: i.MX 6UltraLite Processor - Low-Power, Secure, Arm® Cortex®-A7 Core</li> <li>• <a href="#">i.MX6SX</a>: i.MX 6SoloX Processors - Heterogeneous Processing with Arm® Cortex®-A9 and Cortex-M4 Cores</li> </ul>
GPIO	<ul style="list-style-type: none"> <li>• <a href="#">PCAL9722</a>: 22-Bit SPI I/O Expander with Agile I/O Features</li> <li>• <a href="#">PCAL9714</a>: 14-Bit SPI I/O Expander with Agile I/O Features</li> </ul>
Radio Chipset	<ul style="list-style-type: none"> <li>• <a href="#">TDF8541</a>: I<sup>2</sup>C-Bus Controlled 4 x 45 W Power Amplifier</li> <li>• <a href="#">SAF4000</a>: Multi-Standard Software Defined Radio Processor With Integrated Audio</li> </ul>
Audio Amplifier	<ul style="list-style-type: none"> <li>• <a href="#">Car Audio Amplifiers</a>: Car Audio Amplifiers</li> </ul>

RF Amplifier	<ul style="list-style-type: none"> <li>• <a href="#">TLH501x</a>: ALNA – Low Noise Active Antenna Amplifier</li> </ul>
Display/Push Button Driver	<ul style="list-style-type: none"> <li>• <a href="#">Automotive LCD Drivers</a>: Automotive LCD Drivers</li> <li>• <a href="#">Automotive Lighting LED Driver ICs</a>: Automotive Lighting - LED Driver ICs</li> </ul>
CD Drive Controller	<ul style="list-style-type: none"> <li>• <a href="#">Audio Converters</a>: Audio Converters</li> </ul>
CAN/LIN Transceiver	<ul style="list-style-type: none"> <li>• <a href="#">TJA144x</a>: Automotive CAN FD Transceiver Family</li> <li>• <a href="#">TJA1044</a>: High-Speed CAN Transceiver with Standby Mode - Mantis Family</li> <li>• <a href="#">TJA1043</a>: High-Speed CAN Transceiver with Standby and Sleep Mode</li> <li>• <a href="#">Automotive LIN Solutions</a>: Automotive LIN Solutions</li> <li>• <a href="#">TJA1463</a>: CAN Signal Improvement Capability Transceiver with Sleep Mode</li> </ul>
Power Management IC	<ul style="list-style-type: none"> <li>• <a href="#">FS5600</a>: Automotive Dual Buck Regulator and Controller with Voltage Monitors and Watchdog Timer</li> <li>• <a href="#">MMPF0100</a>: 14-Channel Configurable PMIC</li> <li>• <a href="#">PF8101-PF8201</a>: 9-Channel Power Management Integrated Circuit (PMIC) for High-Performance Processing Applications</li> <li>• <a href="#">VR5500</a>: High Voltage PMIC with Multiple SMPS</li> <li>• <a href="#">VR5510</a>: Multi-Channel (9) PMIC for S32G Processor – 8 High Power, 1 Low Power, Fit for ASIL D Safety Level</li> <li>• <a href="#">PF8100-PF8200</a>: 12-Channel Power Management Integrated Circuit (PMIC) for High-Performance Processing Applications</li> <li>• <a href="#">PF7100</a>: 7-Channel Power Management Integrated Circuit for High Performance Applications, Fit for ASIL B Safety Level</li> <li>• <a href="#">PF5020</a>: Multi-Channel (5) PMIC for Automotive Applications – 4 High Power and 1 Low Power, Fit for ASIL B Safety Level</li> <li>• <a href="#">PF5024</a>: Multi-Channel (4) PMIC for Automotive Applications – 4 High Power, Fit for ASIL B Safety Level</li> </ul>
Sensors	<ul style="list-style-type: none"> <li>• <a href="#">Sensors</a>: Sensors</li> </ul>
NFC Tag	<ul style="list-style-type: none"> <li>• <a href="#">NCx3310</a>: NFC Forum-Compliant Tag IC with I<sup>2</sup>C for Automotive</li> </ul>
Bluetooth	<ul style="list-style-type: none"> <li>• <a href="#">88Q9098</a>: 2.4/5 GHz Dual-Band 2x2 Wi-Fi<sup>®</sup> 6 (802.11ax) + Bluetooth<sup>®</sup> 5.3 Automotive Solution</li> </ul>
Software	<ul style="list-style-type: none"> <li>• <a href="#">i.MX Software</a>: i.MX Software and Development Tools</li> <li>• <a href="#">Professional Support for Processors and Microcontrollers</a></li> <li>• <a href="#">NXP Engineering Services</a>: NXP Engineering Services</li> </ul>
Automotive Ethernet	<ul style="list-style-type: none"> <li>• <a href="#">TJA1120</a>: TJA1120, ASIL B Compliant Automotive Ethernet 100BASE-T1 PHY Transceiver</li> <li>• <a href="#">TJA1104</a>: TJA1104, MACsec Enabled ASIL B Compliant Automotive Ethernet 100BASE-T1 PHY Transceiver</li> <li>• <a href="#">TJA1103</a>: TJA1103, ASIL B Compliant Automotive Ethernet 100BASE-T1 PHY Transceiver</li> <li>• <a href="#">TJA1102A</a>: TJA1102A/TJA1102AS, Dual/Single Port Automotive Ethernet 100BASE-T1 PHY Transceiver</li> <li>• <a href="#">TJA1101</a>: TJA1101B, IEEE 100BASE-T1 Compliant Automotive Ethernet PHY Transceiver</li> </ul>
NFC Tag	<ul style="list-style-type: none"> <li>• <a href="#">NCx3310</a>: NFC Forum-Compliant Tag IC with I<sup>2</sup>C for Automotive</li> </ul>
CAN / LIN Transceiver	<ul style="list-style-type: none"> <li>• <a href="#">TJA1128</a>: LIN Mini System Basis Chip</li> </ul>

View our complete solution for [Connected Radio](#).

**Note:** The information on this document is subject to change without notice.

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